

IN THE CLAIMS:

Please amend claims 47, 52, and 54 and cancel claims 49-51 and 53, without prejudice or disclaimer, as follows.

1-27. (Cancelled)

28. (Previously Presented) A method, comprising:

providing location privacy for a terminal node in communication with a communication partner node in a communication network system comprising at least a first communication network, at least one server entity, and a plurality of agent entities;

identifying a respective node communicating via said communication network system by its permanent network address and addressing the respective node by a temporary network address;

maintaining by each of said at least one server entities a record of said plurality of agent entities and their respective location within the network system;

requesting, by said terminal node, said at least one server entity for location privacy;

selecting, at said at least one server entity, a specific one of said plurality of agent entities, based on data maintained in said record of said server entity and said temporary network address of said requesting terminal node; and

communicating messages between said terminal node and said communication

partner node via said selected one of said agent entities.

29. (Previously Presented) The method according to claim 28, further comprising:

configuring said request to include the network address of said communication partner node with which a communication is desired to be performed, the permanent network address of said requesting terminal node, and said temporary network address of said requesting terminal node by which it is addressable within said communication network system.

30. (Previously Presented) The method according to claim 28, further comprising:
deriving said respective location of said agent entities based on a network domain to which the agent entity is assigned; and
representing the domain by a network address range in the network.

31. (Previously Presented) The method according to claim 30, further comprising:
basing said selecting on said known network address of said communication partner node with which a communication is desired to be performed, which is included in said request.

32. (Previously Presented) The method according to claim 31, wherein said

selecting comprises:

first retrieving a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;

second retrieving a second network domain represented by a network address range to which address range the address of the communication partner node belongs;
and

determining the agent entity to be selected, based on said retrieved information.

33. (Previously Presented) The method according to claim 28, further comprising:
informing said requesting terminal node about the selected agent entity before communicating messages.

34. (Previously Presented) The method according to claim 28, further comprising:
creating, by said terminal node at said selected agent entity, a mapping between the terminal node's permanent network address and its temporary network address; and
creating, by said terminal node at said communication partner node, a mapping between the terminal node's permanent network address and the selected agent entity's address.

35. (Previously Presented) A communication network system, comprising:
at least a first communication network, wherein a respective node communicating

via said communication network system is identified by its permanent network address and addressable by a temporary network address;

at least one server entity;

a plurality of agent entities, wherein each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system;

a database configured to maintain a record of said plurality of agent entities and their respective location within said communication network system; and

a processor configured to select a specific one of said plurality of agent entities, based on data maintained in said record and a temporary network address of a requesting terminal node.

36. (Previously Presented) The communication network system according to claim 35, wherein:

said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

37. (Previously Presented) The communication network system according to claim 35, wherein:

to each of said communication networks there is associated one of said server entities.

38. (Previously Presented) The communication network system according to claim 35, wherein:

to each of said communication networks there is associated a plurality of said agent entities.

39. (Cancelled)

40. (Previously Presented) The communication network system according to claim 35, wherein:

said respective location of said agent entities is derivable based on a network domain to which the agent entity is assigned, the domain being represented by a network address range in the network.

41. (Previously Presented) The communication network system according to claim 40, wherein said processor comprises:

a selector configured to comprise a first retrieving unit configured to retrieve a first network domain represented by a network address range to which address range the temporary address of the requesting terminal node belongs;

a second retrieving unit configured to retrieve a second network domain represented by a network address range to which address range the address of the communication partner node belongs; and

a determination unit configured to determine the agent entity to be selected, based on said retrieved information.

42. (Previously Presented) The communication network system according to claim 35, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system.

43. (Previously Presented) The communication network system according to claim 35, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system, and said server entity is configured to extend said record by adding record information from other server entities within said communication network system.

44. (Previously Presented) The communication network system according to claim 35, further comprising:

a transmitter configured to receive and send information used for forming and

maintaining said record, receive requests from terminal nodes, and configured to send processing results to a requesting terminal.

45. (Previously Presented) The communication network system according to claim 44, wherein:

said transmission unit is configured to send processing results to a selected agent entity.

46. (Previously Presented) The communication network system according to claim 35, wherein each of said plurality of agent entities comprises

a memory unit configured to cache a mapping of a permanent address identifying a terminal node to a temporary address of said terminal node indicative of a location of said terminal node, and

a routing unit configured to forward data packets received from said terminal node to an addressed communication partner node and to forward data packets received from said communication partner to said terminal node, wherein said forwarding is based on the cached mapping information in said memory unit.

47. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent

network address and addressable by a temporary network address;

at least one server entity;

a plurality of agent entities; and wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is configured to

provide location privacy for a terminal node in communication with a communication partner node in said communication network system comprising at least a first communication network,

identify a respective node communicating via said communication network system by its permanent network address and address the respective node by a temporary network address,

maintain by each of said at least one server ~~entities~~entity a record of said plurality of agent entities and their respective location within the network system,

request, by said terminal node, said at least one server entity for location privacy,

select, at said at least one server entity, a specific one of said plurality of agent entities, based on data maintained in said record of said server entity and said temporary network address of said requesting terminal node, and

communicate messages between said terminal node and said communication partner node via said selected one of said agent entities.

48. (Previously Presented) The communication network system according to claim 42, wherein:

said record is configured by a network operator dependent on a topology of a communication network forming a communication network system, and said server entity is configured to extend said record by adding record information from other server entities within said communication network system.

49-51. (Cancelled)

52. (Currently Amended) A communication network system, comprising:

at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;

at least one server entity; and

a plurality of agent entities; wherein

each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is configured to

first retrieve a first network domain represented by a network address range to which address range the temporary address of the requesting-terminal node belongs,

second retrieve a second network domain represented by a network address range to which address range the address of ~~the~~a communication partner node belongs, and determine ~~the~~an agent entity to be selected, based on said retrieved information.

53. (Cancelled)

54. (Currently Amended) A communication network system, comprising:
at least a first communication network, wherein a respective terminal node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
at least one server entity; and
a plurality of agent entities; wherein
each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system, wherein said terminal node is configured to
create, by said terminal node at ~~said~~a selected agent entity, a mapping between the terminal node's permanent network address and its temporary network address, and
create, by said terminal node at ~~said~~a communication partner node, a mapping between the terminal node's permanent network address and ~~the~~a selected agent entity's address.

55. (Previously Presented) A communication network system, comprising:

- at least a first communication network, wherein a respective node communicating via said communication network system is identified by its permanent network address and addressable by a temporary network address;
- at least one server entity;
- a plurality of agent entities, wherein each of said at least one server entity maintains a record of said plurality of agent entities and their location within the network system;
- database means for maintaining a record of said plurality of agent entities and their respective location within said communication network system; and
- processing means for selecting a specific one of said plurality of agent entities, based on data maintained in said record and a temporary network address of a requesting terminal node.